

the body, separated from the rest of the gill by a long distance. Only the inner gill is present. Anteriorly in the umbonal region, and closely associated with the gill posteriorly, is a prominent organ of unknown function. The sexual duct is mainly of mesodermal origin.

XL.—*A List of the Orthoptera, Hymenoptera, and Hemiptera collected by Miss Kingsley on the River Ogové, with Descriptions of some new Genera and Species.* By W. F. KIRBY, F.L.S., F.E.S., &c., Assistant in Zoological Department, British Museum (Natural History).

[Plate XII.]

THE collection formed by Miss Kingsley, though small, contained several species of considerable interest, in addition to the novelties; and hence I have thought it worth while to prepare a complete list. Eight species in all are here described as new, for two of which it has been necessary to establish new genera. It is, however, to be regretted that in most cases only single specimens were received, and several of them were immature, or the number of new species might have been larger.

Order ORTHOPTERA.

Family Blattidæ.

Subfamily PANCHLORINÆ

TRICHOMERA, gen. nov.

Female.—Apterous; front of head rounded, projecting beyond the prothorax; face hardly oblique; antennæ thickened at base and tapering to tips; prothorax moderately arched, the hinder angles rounded off, those of the meso- and metathorax less rounded and more produced backwards; tibiæ strongly spined above, but femora with no spines, but only clothed with fine hair; abdomen very broad, supra-anal plate triangularly emarginate at the extremity to nearly half its length; cerci very broad, pointed at the end, and a little shorter than the supra-anal lamina.

The unarmed femora place this genus in the Panchlorinæ, but in shape it resembles the females of some of the Blattinæ. The male is probably winged.

Trichomera insignata, sp. n. (Pl. XII. fig. 5.)

Long. corp. 20–21 millim., lat. 13 millim.

Female.—Blackish, with testaceous markings; face nearly smooth, shining black below the vertex, the sides, mouth, and a band within the eyes and antennæ testaceous; vertex testaceous in front, with blackish streaks projecting into it from behind; head and thorax clothed with fine down; prothorax and sides of meso- and metathorax finely punctured, middle of meso- and metathorax and abdomen rather coarsely granulated; mesothorax testaceous, somewhat speckled with reddish brown, the centre filled up with a large blackish blotch, with two projecting angles on each side in front and behind, the two innermost of the hinder projections extending to the hinder margin of the prothorax, and the second of the front projections connected with a large oblong black patch bordering part of the sides of the prothorax; meso- and metathorax bordered on the sides with reddish brown and with several irregular testaceous markings; on the abdomen these are continued more regularly, forming a central and nearly parallel series, and two outer series, the first of which is nearly straight and the second connected with the testaceous border below the lateral angles of the segments; supra-anal plate black, with a broad testaceous band on each side; cerci black; antennæ reddish, shading into brown; pectus testaceous; abdomen brown beneath.

Two specimens obtained.

Family **Mantidæ**.Subfamily *MANTINÆ*.*HIERODULA*, Burm.

A single immature specimen of this genus, remarkable for the very heavy black band on the front femora and tibiæ and for the black spines of the latter.

Family **Phasmidæ**.Subfamily *PALOPHINÆ*.*Palophus centaurus*.

Palophus centaurus, Westw. Cat. Phasm. p. 91. n. 233, pl. xxxii. fig. 1 (1859); Brogn. Nouv. Arch. Mus. Paris, (3) iii. p. 195, pl. viii., pl. ix. figs. 1–4 (1892).

One of the largest winged African Phasmidæ. A single female specimen was in the collection.

Subfamily PHASMINÆ.

BATHYCHARAX, gen. nov.

Female.—Apterous, rather stout, granulated; antennæ rather shorter than the front femora, 23-jointed, with most of the joints long and cylindrical; scape flattened, about twice as long as broad, second joint also longer than broad and considerably longer than the following joints; front legs much longer and front femora much thicker than in the last two pairs of legs.

Readily distinguished from *Phasma* (*Bacillus* auct.) by the granulated body and the cylindrical joints of the antennæ.

Bathycharax granulatus, sp. n. (Pl. XII. fig. 9.)

Uniform brown, except that the face is varied above with black and below with yellow. Head with a row of 4 raised tubercles behind; pronotum with 3 imperfectly formed grooves and a transverse one dividing it nearly equally; there is also a distinct carina on each side; mesonotum thickly granulated and with 3 central carinæ, the lateral ones not extending to its extremity, but the central one continued along the metanotum and abdomen; abdomen with segments 2-8 (counting the median segment as 1) gradually diminishing in length; ninth short and transverse; tenth three times as long as broad, gradually tapering, and extending for half its length beyond the operculum; cerci very short, rather broad and rounded, just projecting on each side at the base of the tenth segment. Under surface of the body carinated throughout on the central line behind the propectus, which is carinated on the sides; most of the hinder part of the body is carinated on the sides both above and below the middle. Legs carinated and sulcated; first joint of front tarsi about as long as all the remaining joints together; first joint of four hinder legs about as long as the terminal joint, the second and third being each about twice as long as the fourth, which is the shortest.

Dimensions.

	millim.
Long. corporis	100
„ antennarum	18
„ capitis	6
„ pronoti	5
„ mesonoti	22
„ metanoti, cum segmento medio ..	17
„ segmenti medii	4

	millim.
Long. segmenti terminali	9
„ femorum anticorum	24
„ „ mediorum	19
„ „ posteriorum	22
„ tibiaram anticarum	26
„ „ mediarum	15
„ „ posteriarum	22

In many particulars this species agrees with the description of *Bacillus Buchholzi*, Gerstaecker, from the Cameroons (Mitth. naturw. Ver. Neu-Vorpommern und Rügen, xiv. p. 99, 1883), but it is much larger, and the structure of the abdomen appears to be very dissimilar in the two insects.

Family Achetidæ.

Subfamily GRYLLOTALPINÆ.

Gryllotalpa africana.

Gryllotalpa africana, Palisot de Beauvois, Ins. Afr. Amér. p. 229, Orth. pl. iii. c. fig. 6 (1805?).

An abundant species throughout the warmer parts of the world.

Family Phasgonuridæ.

Subfamily HETRODINÆ.

Cosmoderus Kingsleyæ, sp. n. (Pl. XII. fig. 7.)

Long. 21-25 millim.

Rufo-testaceous, abdomen inclining to cupreous, especially in the female; face yellowish, slightly varied with red, and with a black spot on each side at the base of the clypeus; antennæ reddish on the basal half, shading into blackish, at least 40-jointed, the scape and second joint thickened, the scape half as long again as broad, the second joint hardly longer than broad, the third joint twice as long as the fourth, the rest tapering and gradually decreasing in length to beyond the middle, when they become longer and more cylindrical; vertex and thorax closely punctured, the latter more coarsely; thorax with two strong spines at the frontal angles, a strong spine on each side, between which runs a raised ridge, and a row of 8 large spines behind. There is one more large spine on each side slightly before the others; on the yellow lower ridge of the thorax most of the spines are red, tipped with black; those on the legs are described in characterizing the genus. The dividing ridge of the thorax is brownish; before